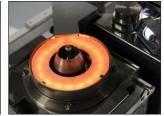




Entry-level single point selective soldering system

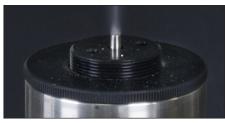














Entry-level single point selective soldering system



Designed to meet the needs of the small/medium batch manufacturer who requires high levels of production flexibility, the Jade MK II entry-level system offers uncompromised selective soldering quality at a very low cost. The Jade MK II is a hand load system, incorporating a universally adjustable tooling carrier capable of accommodating PCB's or pallets up to 457×508 mm.

Our patented Drop-Jet design fluxer offers quick and effective flushing of the pressurised flux chamber. This helps to keep maintenance levels to a minimum whilst enabling use of higher solid content fluxes as well as water-soluble fluxes.

As part of the entry-level philosophy for this system, a low maintenance solder bath and pump mechanism has been developed which moves in three axes of movement whilst not limiting access to the PCB. Solder is applied using proven technology through our AP nozzle design or custom specialised nozzles, incorporating patented spiral solder return to bath technology offering reduced solder balling potential.

As with all Pillarhouse systems, the soldering process is enhanced by a hot Nitrogen curtain which provides an inert atmosphere. This method of soldering also assists in the prevention of oxidisation and provides a local preheat to the joint, thus reducing thermal shock to localised components.



1.5MM MICRO-NOZZLE



OPERATION

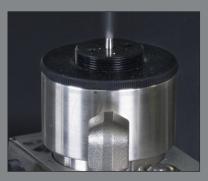
The Jade MKII is controlled by a PC, through PillarCOMM, a Windows® based 'Point & Click' interface with PCB image display, as illustrated above. Additionally, our PillarPAD offline package allows the operator to produce programs independently from the machine using Gerber data.



JET-TIP NOZZLE



JET-WAVE NOZZLE



ULTRASONIC FLUX HEAD

PILLARGEN 40 Nitrogen generation system









TOPSIDE INSTANT IR PREHEAT



SOLDER BATH AND PUMP ASSEMBLY WITH DROP-JET FLUX HEAD AND PROGRAMMING CAMERA

STANDARD FEATURES

Integral PC and machine mounted TFT monitor Inerted Nitrogen system

Auto solder top-up (wire feed) & solder level detect

Drop-Jet fluxer

Set of AP style solder nozzle tips

Internal fume extraction

Colour programming camera

Solder wave height measurement and correction

Universally adjustable tooling carrier

Thermal nozzle calibration system using integrated

setting camera (requires manual correction)

PillarCOMM Windows® based 'Point & Click' interface

Lead-free compatible

PillarPAD offline programming system

Day-to-day service kit

Multiple level password protection

Manual fiducial correction system

MONITORING OPTIONS

Flux presence sensor - thermistor style

Flux spray, flow and spray & flow

Pump rpm

O₂ ppm

Nitrogen flow

SYSTEM OPTIONS

Top-side instant IR preheat

Closed loop temperature control

- via pyrometer or thermocouple

Bottom-side IR ring heater

Bottom-side hot Nitrogen selective preheat

Automatic fiducial correction

Ultrasonic fluxing

Dual Drop-Jet / ultrasonic fluxing

Laser PCB warp correction

Micro nozzle assembly

Solder reel identification

Rapid change solder bath and pump system capability

- does not include solder bath and pump

Solder bath coding - identifies correct bath for program

- only suitable for use with rapid change solder bath and pump system

Encoders on X, Y and Z axis

Larger PCB handling size

Nitrogen generator

Pillarhouse... Expect innovation

www.pillarhouse.co.uk



JADE MK II

Pillarhouse INTERNATIONAL

SPECIFICATIONS

Height: 1403mm / 55" - excluding light stack

Width: 1000mm / 40"
Depth: 1351mm / 53"

Board size: 457mm x 508mm / 18"x 20"

- larger PCB size available upon request

Edge clearance: Above / below 3mm

Height clearance: Above 90mm / below 40mm nominal

Above 190mm - special application

Solder: Most commonly used solder types - including lead-free

Solder pot capacity: 8kg

Flux:

Applicators: AP style - 2.5mm to 16mm dia.

Extended AP style - 2.5mm to 20mm dia.

Micro nozzle - 1.5mm to 2.5mm Jet-Tip style - 6mm to 20mm dia. Jet-Wave nozzle - up to 25mm width

Special dedicated nozzles available upon request Low maintenance Drop-Jet system. Low solids

(below 8%), no clean flux, pressurised and inerted

system, optional water-soluble system available

X, Y & Z axis resolution: 0.1mm Repeatability: +/- 0.05mm

Nitrogen usage: 35 litres gas/min. 5 bar pressure

Nitrogen purity: 99.995% or better
Air supply pressure: 5 bar / 72 psi
Power supplies: Single phase + PE
Voltage: 208V - 250V
Frequency: 50/60Hz
Power: 4kVA

Power with IR preheat: 6.5kVA - Top-side

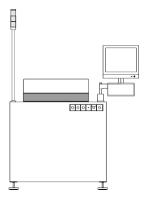
8kVA - Top with bottom-side ring heater

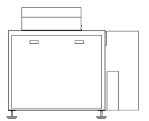
Transport: Hand load

Tooling: Integral adjustable board guides, includes finger

extensions and board clamps

Programming: PillarCOMM Windows® based 'Point & Click' interface





Pillarhouse International Ltd.

Rodney Way, Widford, Chelmsford, Essex CM1 3BY UK Pillarhouse USA, Inc.

201 Lively Blvd, Elk Grove Village, IL 60007 USA Pillarhouse (Suzhou) Soldering Systems Co., Ltd. 11 Yuanqi Road, Xiangcheng, Suzhou, China 215131 www.pillarhouse.co.uk

Tel: +44 (0) 1245 491333 Fax: +44 (0) 1245 491331

www.pillarhouseusa.com

Tel: +1 847 593 9080 Fax: +1 847 593 9084

www.pillarhouse.cn

Tel: +86 512 6586 0460 Fax: +86 512 6959 0567